Distributed Shopping Platform

This project implements a distributed shopping platform using gRPC for communication between clients (sellers and buyers) and a central market server. The system is designed to be deployed on multiple virtual machines hosted on Google Cloud.

Key Components

1. Market (Central Platform): The Market serves as the central hub, acting as an intermediary between sellers and buyers. It maintains seller accounts, listings, transactions, reviews, and notifications.

    2. Address: Run on a Google Cloud VM with a publicly accessible IP address.

2. Seller (Client): Provides the ability to manage product listings and interact with the Market node. Each seller:

    1. Registers with the Market.
    2. Adds, updates, deletes, and views items.
    3. Receives notifications from the Market.
    4. Has a unique address (ip:port) where their notification server is hosted
    5. Generates and maintains a secure UUID, sent to the Market with each interaction.

3. Buyer (Client): Provides the ability to search for products and place orders. Each buyer:

    1. Interacts with the Market to search, buy, and rate products.
    2. Maintains a wish list to receive targeted notifications.
    3. Has a unique address (ip:port) where their notification server is hosted